

1. A method of making double stranded RNA having a selected sequence comprising the steps of:
  - 5 a) forming an admixture of an RNA dependent RNA polymerase, reagents for the synthesis of transcript nucleic acids, and at least one template nucleic acid, said template nucleic acid acting as a template for the synthesis of RNA encoding said selected sequence upon the imposition of nucleic acid synthesis conditions and in the presence of said reagents and RNA dependent RNA polymerase;
  - 10 b) imposing nucleic acid synthesis conditions on said admixture to form an amplification product comprising double stranded RNA encoding the selected sequence.
2. The method of claim 1 wherein said template nucleic acid is a deoxyribonucleic acid.
- 15 3. The method of claim 1 wherein said RNA dependent RNA polymerase is Q-Beta replicase and modifications thereto.
4. The method of claim 1 wherein said reaction product comprising double stranded RNA inhibits the expression of a selected gene in a cell.
- 20 5. The method of claim 1 wherein said template nucleic acid has portions represented by the formula:

25 5'A-B-C 3'

- wherein at least one letter A and C represents a sequence recognized by said RNA dependent RNA polymerase and at least one of said A and C represents the antisense of said sequence recognized by said RNA dependant RNA polymerase, and the letter B represents a sequence corresponding to the selected sequence of the antisense of said selected sequence.
- 30 6. The method of claim 5 wherein said sequence represented by A and C are synthesized with the sequence represented B.
  - 35 7. The method of claim 5 wherein said sequence represented by A and C are cloned to the sequence represented by B.
  8. The method of claim 5 wherein said template is a deoxyribonucleic acid.
  - 40 9. The method of claim 8 wherein said admixture further comprises a DNA-dependent RNA polymerase, said T7 DNA-dependent RNA polymerase transcribing said template to make at least one RNA recognized by said RNA dependent RNA polymerase which RNA dependent RNA polymerase generates an amplification product.

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10. The method of claim 1 wherein said reagents for the synthesis of nucleic acid comprise modified nucleotides.
- 5 11. The method of claim 10 wherein said modified nucleotides have modifications at the number two position.
12. The method of claim 11 wherein said modified nucleotides comprise limited 2'-amino, 2'-fluoro, 2'-azido, 2'Omethyl, 2' ara.
- 10 13. The method of claim 1 wherein said amplification product is used for RNAi.
14. A kit for making double stranded RNA comprising:
  - a) an RNA dependent RNA polymerase which RNA dependent RNA polymerase synthesizes double stranded nucleic acid in the presence of reagents;
  - 15 b) reagents for the synthesis of transcript nucleic acids;
  - c) means for making at least one template nucleic acid, said template nucleic acid acting as a template for the synthesis of RNA encoding said selected sequence upon the imposition of nucleic acid synthesis conditions and in the presence of said reagents and RNA dependent RNA polymerase;
  - 20 d) instructions for imposing nucleic acid synthesis conditions on said admixture to form an amplification product comprising double stranded RNA encoding the selected sequence.
- 25 15. The kit of claim 14 wherein said template nucleic acid is a deoxyribonucleic acid.
- 30 16. The kit of claim 14 wherein said RNA dependent RNA polymerase is Q-Beta replicase and modifications thereto.
17. The kit of claim 14 wherein said reaction product comprising double stranded RNA inhibits the expression of a selected gene in a cell.
- 35 18. The kit of claim 14 wherein said template nucleic acid has portions represented by the formula:

5' A-B-C 3'
- 40 45 wherein at least one letter A and C represents a sequence recognized by said RNA dependent RNA polymerase and at least one of said A and C represents the antisense of said sequence recognised by said RNA dependant RNA polymerase, and the letter B represents a sequence corresponding to the selected sequence of the antisense of said selected sequence.

19. The method of claim 18 wherein said sequence represented by A and C are synthesized with the sequence represented B.
20. The kit of claim 18 wherein said sequence represented by A and C are cloned to the sequence represented by B.  
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21. The kit of claim 18 wherein said template is a deoxyribonucleic acid.
22. The kit of claim 18 wherein said admixture further comprises a DNA-dependent RNA polymerase, said DNA-dependent RNA polymerase transcribing said template to make at least one RNA recognized by said RNA dependent RNA polymerase which RNA dependent RNA polymerase generates an amplification product.  
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23. The kit of claim 14 wherein said reagents for the synthesis of nucleic acid comprise modified nucleotides.  
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24. The kit of claim 23 wherein said modified nucleotides have modifications at the number two position.
- 20 25. The kit of claim 24 wherein said modified nucleotides comprise limited 2'-amino, 2'-fluoro, 2'-azido, 2'Omethyl, 2' ara.
26. The kit of claim 14 wherein said amplification product is used for RNAi.  
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